AMENDMENTS TO THE CLAIMS

1. (Original) A compound having Formula 1:

$$R_2$$
 Z_2
 R_3
(Formula 1)

or pharmaceutically-acceptable form thereof, wherein:

- R₁ is hydrogen, halogen, C₁-C₇alkyl, C₁-C₆alkoxy, C₃-C₇cycloalkyl(C₀-C₂alkyl), heterocycloalkyl(C₀-C₂alkyl), sulfonamide, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkoxy, mono- or di-(C₁-C₆alkyl)amino, or mono- or di-(C₁-C₆alkyl)amino(C₁-C₆alkyl); or
- R₁ is phenyl or phenyl fused to a 5 to 7-membered heterocycloalkyl ring containing 1 or 2 heteroatoms chosen from N, O, and S, each of which is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, CHO, halogen, C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, C₁-C₆alkylthio, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkoxy, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), c₂-C₆alkanoyl, and -C(O)R₁₃ where R₁₃ is C₁-C₃haloalkyl, phenyl, heterocycloalkyl, or heteroaryl;
- W is phenyl or a 5- or 6-membered heteroaryl containing from 1 to 4 heteroatoms independently chosen from nitrogen, oxygen, and sulfur; wherein W is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, CHO, halogen, oxo, C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), and C₂-C₆alkanoyl;

X is N or CH;

 R_2 is C_1 - C_7 alkyl, C_3 - C_7 cycloalkyl(C_0 - C_2 alkyl), heterocycloalkyl(C_0 - C_2 alkyl), C_1 - C_6 alkoxy, (C_1 - C_6 alkoxy) C_1 - C_6 alkoxy) C_1 - C_6 alkoxy) or

 R_2 is phenyl(C_0 - C_2 alkyl) or heteroaryl(C_0 - C_2 alkyl), each of which is substituted with 0 to 3 substituents independently chosen from

- (i) hydroxy, halogen, nitro, cyano, amino, sulfonamide, -CHO, C₁-C₆haloalkyl, and C₁-C₆haloalkoxy, and
- (ii) C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, (C₁-C₆alkoxy)C₁-C₆alkoxy)C₁-C₆alkoxy, C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), C₂-C₆alkanoyl, heterocycloalkyl(C₀-C₂alkyl), and -C(O)R₁₃; each of which (ii) is substituted with 0 to 3 substituents independently chosen from halogen, hydroxy, amino, nitro, cyano, C₁-C₄alkoxy, C₃-C₇cycloalkyl, and mono- and di-(C₁-C₄alkyl)amino;

 Z_2 is

wherein

R₈ and R₉ are independently hydrogen, C₁-C₆alkyl, C₁-C₆alkoxy, or halogen; and n is 0, 1, or 2;

 R_{10} and R_{11} are independently

- (iii) hydrogen or C₁-C₆alkyl; or
- (iv) phenyl or heteroaryl, each of which is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, -CHO, halogen, C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkoxy, C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), C₂-C₆alkanoyl, and -C(O)R₁₃;

R₃ is hydrogen or C₁-C₆alkyl, or

R₃ is C₃-C₇cycloalkyl(C₀-C₂alkyl), heterocycloalkyl(C₀-C₂alkyl), phenyl, or heteroaryl, each of which is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro,

- cyano, amino, sulfonamide, -CHO, halogen, C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkoxy, C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), C₂-C₆alkanoyl, and -C(O)R₁₃; or
- R₃ is phenoxy phenyl, each of which phenyl rings is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, -CHO, halogen, C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkoxy, C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), C₂-C₆alkanoyl, and -C(O)R₁₃.
- 2. (Currently Amended) A compound or form thereof according to Claim 1, wherein R₁ is hydrogen, halogen, C₁-C₇alkyl, C₁-C₆alkoxy, C₃-C₇cycloalkyl(C₀-C₂alkyl), heterocycloalkyl(C₀-C₂alkyl), sulfonamide, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkoxy, mono- or di-(C₁-C₆alkyl)amino, or mono- or di-(C₁-C₆alkyl)amino(C₁-C₆alkyl); or
- R₁ is phenyl substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, -CHO, halogen, C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), and C₂-C₆alkanoyl;
- W is phenyl or a 5- or 6-membered heteroaryl ring; substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, -CHO, halogen, oxo, C₁-C₆alkyl; C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkoxy, C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), and C₂-C₆alkanoyl;

X is N or CH;

 R_2 is C_1 - C_7 alkyl, C_3 - C_7 cycloalkyl(C_0 - C_2 alkyl), heterocycloalkyl(C_0 - C_2 alkyl), C_1 - C_6 alkoxy, (C_1 - C_6 alkoxy) C_1 - C_6 alkoxy) C_1 - C_6 alkoxy) or

R₂ is phenyl(C₀-C₂alkyl) or 5- or 6-membered heteroaryl(C₀-C₂alkyl), each of which is substituted with 0 to 3 substituents independently chosen from

- (i) hydroxy, halogen, nitro, cyano, amino, sulfonamide, -CHO, C₁-C₆haloalkyl, and C₁-C₆haloalkoxy, and
- (ii) C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, (C₁-C₆alkoxy)C₁-C₆alkoxy)C₁-C₆alkoxy, C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), C₂-C₆alkanoyl, and heterocycloalkyl(C₀-C₂alkyl); each of which (ii) is substituted with 0 to 3 substituents independently chosen from halogen, hydroxy, amino, nitro, cyano, C₁-C₄alkoxy, C₃-C₇cycloalkyl, and mono- and di-(C₁-C₄alkyl)amino;

Z₂ is

wherein

 R_8 and R_9 are independently hydrogen, C_1 - C_6 alkyl, C_1 - C_6 alkoxy, or halogen; and n is 0, 1, or 2;

 R_{10} and R_{11} are independently

- (iii) hydrogen or C₁-C₆alkyl; or
- (iv) phenyl or a 5- or 6 membered heteroaryl ring, each of which is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, -CHO, halogen, C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), and C₂-C₆alkanoyl;

R₃ is hydrogen or C₁-C₆alkyl, or

R₃ is C₃-C₇cycloalkyl(C₀-C₂alkyl), heterocycloalkyl(C₀-C₂alkyl), phenyl, or a 5- or 6-membered heteroaryl, each of which is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, -CHO, halogen, C₁-C₆alkyl, C₂-

- C_6 alkenyl, C_2 - C_6 alkynyl, C_3 - C_7 cycloalkyl, C_1 - C_6 alkoxy, C_1 - C_6 haloalkyl, C_1 - C_6 alkoxy) C_1 - C_6 alkoxy) C_1 - C_6 alkoxy) C_1 - C_6 alkoxy) C_1 - C_6 alkyl)amino, amino(C_1 - C_6 alkyl), mono- and di-(C_1 - C_6 alkyl)amino(C_1 - C_6 alkyl), and C_2 - C_6 alkanoyl; or
- R₃ is phenoxy phenyl, each of which phenyl rings is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, -CHO, halogen, C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), and C₂-C₆alkanoyl.
 - 3. (Currently Amended) A compound or form thereof according to Claim 1-or 2 wherein
- R_1 is halogen, C_1 - C_7 alkyl, C_1 - C_6 alkoxy, C_3 - C_7 cycloalkyl(C_0 - C_2 alkyl), or heterocycloalkyl(C_0 - C_2 alkyl); or
- R₁ is phenyl substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, -CHO, halogen, C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), and C₂-C₆alkanoyl.
- 4. (Original) A compound or form thereof according to Claim 3 wherein R₁ is halogen or C₁-C₇alkyl; or
- R₁ is phenyl substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, halogen, C₁-C₆alkyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₂haloalkyl, C₁-C₂haloalkoxy, and mono- and di-(C₁-C₄alkyl)amino.
- 5. (Original) A compound or form thereof according to Claim 4 wherein
 R₁ is phenyl substituted with 0 to 3 substituents independently chosen from hydroxy, nitro,
 cyano, amino, halogen, C₁-C₄alkyl, C₁-C₄alkoxy, C₁-C₂haloalkyl, C₁-C₂haloalkoxy, and
 mono- and di-(C₁-C₄alkyl)amino.

- 6. (Original) A compound or form thereof according to Claim 4 wherein R₁ is bromo or C₁-C₄alkyl; or R₁ is phenyl substituted with 0 to 2 substituents independently chosen from fluoro, chloro, bromo, C₁-C₂alkyl, and C₁-C₂alkoxy.
 - 7. (Currently Amended) A compound or form thereof according to any one of Claims 1 to Claim 6 wherein
- W is phenyl, pyridyl, pyrimidinyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl, thienyl, oxazolyl, or isoxazolyl, each of which is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, sulfonamide, -CHO, halogen, oxo, C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₆haloalkyl, C₁-C₆haloalkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, (C₁-C₆alkoxy)C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl), and C₂-C₆alkanoyl.
- 8. (Original) A compound or form thereof according to Claim 7 wherein
 W is phenyl, pyridyl, pyrimidinyl, imidazolyl, pyrrolyl, pyrazolyl, furanyl, thienyl, oxazolyl, or isoxazolyl, each of which is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, halogen, oxo, C₁-C₄alkyl, C₁-C₄alkoxy, C₁-C₂haloalkyl, C₁-C₂haloalkoxy, and mono- and di-(C₁-C₄alkyl)amino.
- 9. (Original) A compound or form thereof according to Claim 8, wherein
 W is imidazolyl, pyrrolyl, or pyrazolyl, each of which is substituted with 0 to 3 substituents independently chosen from hydroxy, cyano, halogen, oxo, C₁-C₄alkyl, C₁-C₄alkoxy, trifluoromethyl, and trifluoromethoxy.
- 10. (Currently Amended) A compound or form thereof according to any one of Claims 1 to Claim 6 of Formula 2

11. (Currently Amended) A compound or form thereof according to any one of Claims 1 to Claim 6 of Formula 3

$$R_2$$
 Z_2
 R_3
(Formula 3).

12. (Currently Amended) A compound or form thereof according to any one of Claims 1 to Claim 6 of Formula 4:

$$R_2$$
 Z_2
 R_3

$$R_2$$
 Z_2
 R_3
(Formula 4).

- 13. (Currently Amended) A compound or form thereof according to any one of Claims 1 to 12 Claim 11, wherein X is N.
- 14. (Currently Amended) A compound or form thereof according to any one of Claims 1 to 12 Claim 11, wherein X is CH.
- 15. (Currently Amended) A compound or form thereof according to any one of Claims 1 to 14 Claim 9 wherein

 Z_2 is

wherein

 R_8 and R_9 are independently hydrogen or C_1 - C_6 alkyl; and n is 0, 1, or 2; and R_{10} and R_{11} are independently hydrogen, C_1 - C_6 alkyl, or phenyl.

16. (Original) A compound or form thereof according to Claim 15, wherein Z_2 is

wherein, R₁₀ and R₁₁ are independently hydrogen, methyl, or ethyl.

- 17. (Original) A compound or form thereof according to Claim 16 wherein R_{10} and R_{11} are both hydrogen.
- 18. (Currently Amended) A compound or form thereof according to any one of Claims 1 to 17 Claim 9 of Formula 6

$$R_2$$
 N N R_3 (Formula 6).

19. (Currently Amended) A compound or form thereof according to any one of Claims 1 to 17 Claim 9 of Formula 7

20. (Currently Amended) A compound or form thereof according to any one of Claims 1 to 17 Claim 9 of Formula 8

21. (Currently Amended) A compound or form thereof according to any one of Claims 1 to 20 Claim 19 wherein

- R₂ is phenyl, pyridyl, pyrimidinyl, pyrazinyl, imidazolyl, pyrrolyl, furanyl, thienyl, oxazolyl, or isoxazolyl, each of which may be either directly attached or bound via a C₁-C₂alkyl linker, and each of which is substituted with 0 to 3 substituents independently chosen from:
 - (i) hydroxy, halogen, nitro, cyano, amino, sulfonamide, -CHO, C₁-C₆haloalkyl, and C₁-C₆haloalkoxy, and
 - (ii) C₁-C₆alkyl, C₂-C₆alkenyl, C₂-C₆alkynyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, (C₁-C₆alkoxy)C₁-C₆alkoxy)C₁-C₆alkoxy, C₁-C₆alkylthio, mono- and di-(C₁-C₆alkyl)amino, amino(C₁-C₆alkyl), mono- and di-(C₁-C₆alkyl)amino(C₁-C₆alkyl), C₂-C₆alkanoyl, and heterocycloalkyl(C₀-C₂alkyl); each of which (ii) is substituted with 0 to 3 substituents independently chosen from halogen, hydroxy, amino, nitro, cyano, C₁-C₄alkoxy, C₃-C₇cycloalkyl, and mono- and di-(C₁-C₄alkyl)amino.
- 22. (Original) A compound or form thereof according to Claim 21, wherein R₂ is phenyl(C₀-C₂alkyl), pyridyl(C₀-C₂alkyl), or pyrimidinyl(C₀-C₂alkyl), each of which is substituted with 0 to 3 substituents independently chosen from:
 - (i) hydroxy, halogen, nitro, cyano, amino, C₁-C₂haloalkyl, and C₁-C₂haloalkoxy, and (ii) C₁-C₆alkyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, (C₁-C₆alkoxy)C₁-C₆alkyl, C₁-C₄alkylthio, mono- and di-(C₁-C₄alkyl)amino, mono- and di-(C₁-C₄alkyl)amino(C₁-C₄alkyl), and heterocycloalkyl(C₀-C₂alkyl); each of which (ii) is substituted with 0 to 3 substituents independently chosen from halogen, hydroxy, amino, nitro, cyano, C₁-C₄alkoxy, C₃-C₇cycloalkyl, and mono- and di-(C₁-C₄alkyl)amino.
 - 23. (Currently Amended) A compound or form thereof according to Claim 25 22, wherein
- R₂ is phenyl or benzyl, each of which is substituted with 0 to 3 substituents independently chosen from halogen, hydroxy, amino, C₁-C₄alkyl, C₁-C₄alkoxy, C₁-C₄alkylthio, C₁-C₂haloalkyl, and C₁-C₂haloalkoxy.

24. (Currently Amended) A compound or form thereof according to any one of Claims 1 to Claim 23, wherein

R₃ is hydrogen or C₁-C₆alkyl, or

- R₃ is C₃-C₇cycloalkyl, (C₃-C₇cycloalkyl)methyl, heterocycloalkyl, (heterocycloalkyl)C₁-C₂alkyl, phenyl, phenyl, pyridyl, pyrimidinyl, pyrazinyl, imidazolyl, pyrrolyl, furanyl, thienyl, oxazolyl, or isoxazolyl, each of which is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, halogen, C₁-C₆alkyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₂haloalkyl, C₁-C₂haloalkoxy, and mono- and di-(C₁-C₄alkyl)amino; or
- R₃ is phenoxyphenyl, each of which phenyl rings is substituted with 0 to 3 substituents independently chosen from hydroxy, nitro, cyano, amino, halogen, C₁-C₆alkyl, C₃-C₇cycloalkyl, C₁-C₆alkoxy, C₁-C₂haloalkyl, C₁-C₂haloalkoxy, and mono- and di-(C₁-C₄alkyl)amino.
- 25. (Original) A compound or form thereof according to Claim 24, wherein R_3 is hydrogen, C_1 - C_6 alkyl, C_3 - C_7 cycloalkyl(C_0 - C_1 alkyl), phenyl, or phenoxyphenyl.
 - 26. (Original) A compound or form thereof according to Claim 25, wherein R_3 is hydrogen or C_1 - C_4 alkyl.
 - 27. (Original) A compound or form thereof according to Claim 1 of Formula 9

28. (Original) A compound or form thereof according to Claim 1 of Formula 10

$$R_1$$
 R_2
 R_3
 R_3
(Formula 10).

29. (Original) A compound or form thereof according to Claim 1 of Formula 11

$$R_2$$
 R_3
 R_3
(Formula 11).

30. (Original) A compound or form thereof according to Claim 1 of Formula 12

$$R_2$$
 R_3
(Formula 12).

31. (Original) A compound or form thereof according to Claim 1 of Formula 13

$$R_2$$
 R_3
(Formula 13).

32. (Original) A compound or form thereof according to Claim 1 of Formula 14

$$R_2$$
 R_1
 R_1
 R_2
 R_3
(Formula 14).

33. (Currently Amended) A compound or form thereof according to Claim 30 to 32, wherein

R₁ is bromo or C₁-C₄alkyl; or

R₁ is phenyl substituted with 0 to 2 substituents independently chosen from fluoro, chloro, bromo, C₁-C₂alkyl, and C₁-C₂alkoxy;

R₂ is phenyl or benzyl, each of which is substituted with 0 to 3 substituents independently chosen from:

- (i) hydroxy, halogen, amino, C1-C2haloalkyl, and C1-C2haloalkoxy, and
- (ii) C_1 - C_6 alkyl, C_1 - C_6 alkoxy, mono- and di- $(C_1$ - C_4 alkyl)amino, mono- and di- $(C_1$ - C_4 alkyl)amino $(C_1$ - C_4 alkyl), piperazinyl $(C_0$ - C_1 alkyl), piperidinyl $(C_0$ - C_1 alkyl), and morpholinyl $(C_0$ - C_1 alkyl); each of which (ii) is substituted with 0 to 3 substituents independently chosen from halogen, hydroxy, amino, C_1 - C_2 alkoxy, and mono- and di- $(C_1$ - C_4 alkyl)amino; and

 R_3 is hydrogen or C_1 - C_4 alkyl.

$$R_{2}$$
 R_{1}
 R_{1}
 R_{2}
 R_{3}

(Formula 13).

32. (Original) A compound or form thereof according to Claim 1 of Formula 14

33. (Currently Amended) A compound or form thereof according to Claim 30 to 32, wherein

R₁ is bromo or C₁-C₄alkyl; or

R₁ is phenyl substituted with 0 to 2 substituents independently chosen from fluoro, chloro, bromo, C₁-C₂alkyl, and C₁-C₂alkoxy;

R₂ is phenyl or benzyl, each of which is substituted with 0 to 3 substituents independently chosen from:

- (i) hydroxy, halogen, amino, C1-C2haloalkyl, and C1-C2haloalkoxy, and
- (ii) C₁-C₆alkyl, C₁-C₆alkoxy, mono- and di-(C₁-C₄alkyl)amino, mono- and di-(C₁-C₄alkyl)amino(C₁-C₄alkyl), piperazinyl(C₀-C₁alkyl), piperidinyl(C₀-C₁alkyl), and morpholinyl(C₀-C₁alkyl); each of which (ii) is substituted with 0 to 3 substituents independently chosen from halogen, hydroxy, amino, C₁-C₂alkoxy, and mono- and di-(C₁-C₄alkyl)amino; and

 R_3 is hydrogen or C_1 - C_4 alkyl.

- 34. (Currently Amended) A compound or form thereof according to any one of Claims 1 to 33 Claim 1, wherein the compound exhibits an IC₅₀ of 25 micromolar or less in an in vitro assay of tumor cell proliferation.
- 35. (Currently Amended) A compound or form thereof according to any one of Claims 1 to 33 Claim 1, wherein the compound exhibits an IC₅₀ of 10 micromolar or less in an in vitro assay of tumor cell proliferation.
- 36. (Currently Amended) A pharmaceutical composition, comprising a compound or form thereof according to any one of Claims 1 to 33 Claim 1, together with at least one pharmaceutically acceptable carrier or excipient.
- 37. (Original) A pharmaceutical composition according to Claim 36, wherein the composition is formulated as an injectable fluid, an aerosol, a cream, a gel, a tablet, a pill, a capsule, a syrup, ophthalmic solution, or a transdermal patch.
 - 38. (Original) A packaged pharmaceutical composition, comprising
 - (a) a pharmaceutical composition according to Claim 36 in a container; and
- (b) instructions for using the composition to treat a patient suffering from an disease or disorder responsive to Hsp90 complex modulation.
- 39. (Original) The packaged pharmaceutical composition of Claim 38 wherein the disease or disorder responsive to Hsp90 complex modulation is cancer, an autoimmune disease, or a neurodegenerative disease.
- 40. (Original) The packaged pharmaceutical composition of Claim 38 wherein the disease or disorder responsive to Hsp90 complex modulation is cancer.

- 41. (Original) The packaged pharmaceutical composition of Claim 38 wherein the disease or disorder responsive to Hsp90 complex modulation is autoimmune/inflammatory disease.
- 42. (Original) The packaged pharmaceutical composition of Claim 38 wherein the disease or disorder responsive to Hsp90 complex modulation is neurodegenerative disease.
- 43. (Original) A method of reducing medication error and enhancing therapeutic compliance of a patient being treated for a disease or disorder responsive to Hsp90 complex modulation, the method comprising providing a packaged pharmaceutical preparation according to Claim 38 wherein the instructions additionally include contraindication and adverse reaction information pertaining to the package pharmaceutical composition.
- 44. (Currently Amended) A method for modulating binding of ATP to Hsp90 complex, the method comprising contacting cells expressing Hsp90 complex with a compound according to any one of Claims 1 to 33 Claim 1 or form thereof in an amount sufficient to detectably decrease the level of an Hsp90 substrate protein *in vitro*.
- 45. (Currently Amended) A method for modulating the activity of Hsp90 complex, the method comprising contacting cells expressing Hsp90 complex with a compound according to any one of Claims 1 to 33 Claim 1 or form thereof in an amount sufficient to detectably decrease the level of an Hsp90 substrate protein *in vitro*.
- 46. (Currently Amended) The method of Claim 44 or Claim 45 wherein the substrate protein is ErbB2, Akt, or Raf.
 - 47. (Original) The method of Claim 46 wherein the cells are present in a mammal.
 - 48. (Original) The method of Claim 47 wherein the mammal is a human.
 - 49. (Original) The method of Claim 47 wherein the mammal is a cat or dog.

- 50. (Currently Amended) A method for treating a patient having a disease or disorder responsive to Hsp90 complex modulation, comprising administering to the patient and effective amount of a compound or form thereof according to any one of Claims 1 to 33 Claim 1.
 - 51. (Original) The method of Claim 50 wherein the patient is a human.
 - 52. (Original) The method of Claim 50 wherein the patient is a cat or dog.
- 53. (Original) The method of Claim 50 wherein the disease or disorder responsive to Hsp90 complex modulation is cancer, an autoimmune disease, or a neurodegenerative disease.
- . 54. (Original) The method of Claim 50 wherein the disease or disorder responsive to Hsp90 complex modulation is cancer.
- 55. (Original) The method of Claim 50 wherein the compound or form is administered orally.
- 56. (Original) The method of Claim 50 wherein the compound or form is administered intravenously, by intramuscularly, or parenterally.
- 57. (Currently Amended) A method for determining the presence or absence of Hsp90 complex in a sample comprising contacting the sample with a compound or form thereof according to any one of Claims 1 to 33 Claim 1 under conditions that permit binding of the compound or form to the Hsp90 complex, detecting a level of the compound or form bound to the Hsp90 complex, and therefrom determining the presence or absence of Hsp90 complex.
- 58. (Original) The method of Claim 57 wherein the compound or form thereof is radiolabelled.
 - 59. (Original) The method of Claim 57, which additionally comprises

- 50. (Currently Amended) A method for treating a patient having a disease or disorder responsive to Hsp90 complex modulation, comprising administering to the patient and effective amount of a compound or form thereof according to any one of Claims 1 to 33 Claim 1.
 - 51. (Original) The method of Claim 50 wherein the patient is a human.
 - 52. (Original) The method of Claim 50 wherein the patient is a cat or dog.
- 53. (Original) The method of Claim 50 wherein the disease or disorder responsive to Hsp90 complex modulation is cancer, an autoimmune disease, or a neurodegenerative disease.
- 54. (Original) The method of Claim 50 wherein the disease or disorder responsive to Hsp90 complex modulation is cancer.
- 55. (Original) The method of Claim 50 wherein the compound or form is administered orally.
- 56. (Original) The method of Claim 50 wherein the compound or form is administered intravenously, by intramuscularly, or parenterally.
- 57. (Currently Amended) A method for determining the presence or absence of Hsp90 complex in a sample comprising contacting the sample with a compound or form thereof according to any one of Claims 1 to 33 Claim 1 under conditions that permit binding of the compound or form to the Hsp90 complex, detecting a level of the compound or form bound to the Hsp90 complex, and therefrom determining the presence or absence of Hsp90 complex.
- 58. (Original) The method of Claim 57 wherein the compound or form thereof is radiolabelled.
 - 59. (Original) The method of Claim 57, which additionally comprises

separating unbound compound from bound compound; and determining the amount of bound compound in the sample.

- 60. (Original) A compound or form thereof according to Claim 1, wherein the compound is:
- 1-{3-[8-(4-Phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-3-o-tolyl-urea;
- 1-(4-Chloro-phenyl)-3-{3-[8-(4-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 1-(2-Methylsulfanyl-phenyl)-3-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 1-{3-[8-(2-Phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-3-o-tolyl-urea;
- 1-(4-Chloro-phenyl)-3-(3-{8-[4-(4-chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-urea;
- 1-(3-{8-[4-(4-Chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-3-o-tolyl-urea;
- 1-(4-Chloro-phenyl)-3-{3-[8-(4-p-tolyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea:
- $1-o-Tolyl-3-\{3-[8-(4-p-tolyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl\}-urea;$
- 1-(4-Chloro-phenyl)-3-{3-[8-(4-methyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 1-(3-Chloro-4-fluoro-phenyl)-3-(3-{8-[4-(4-chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-urea;
- 1-(3-Chloro-4-fluoro-phenyl)-3-{3-[8-(4-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 1-(3-{8-[4-(4-Chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-3-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-urea;
- 1-(3-{8-[4-(4-Chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-3-(4-morpholin-4-ylmethyl-phenyl)-urea;
- 1-(3-{8-[4-(4-Chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-3-{4-[(3-ethoxy-propylamino)-methyl]-phenyl}-urea;
- $1-(4-Chloro-phenyl)-3-\{3-[8-(3-phenyl-pyrazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl\}-urea;\\$

- 1-(3-Chloro-4-fluoro-phenyl)-3-{3-[8-(3-phenyl-pyrazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 1-(3-Chloro-4-fluoro-phenyl)-3-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 4-Chloro-N-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide;
- 3-Morpholin-4-ylmethyl-N-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide;
- 4-Morpholin-4-ylmethyl-N-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide;
- 1-(3-Chloro-4-fluoro-phenyl)-3-{3-[8-(2-p-tolyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 1-{3-[8-(2-p-Tolyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-3-(3-trifluoromethyl-phenyl)-urea;
- 1-(4-Morpholin-4-ylmethyl-phenyl)-3-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 6-(4-Morpholin-4-ylmethyl-phenyl)-8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazine;
- 1-(4-Chloro-phenyl)-3-{3-[8-(2-o-tolyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 1-(3-Chloro-4-fluoro-phenyl)-3-{3-[8-(2-o-tolyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 1-(4-Chloro-phenyl)-3-(3-{8-[2-(2-methoxy-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-urea;
- $1-(4-Chloro-phenyl)-3-(3-\{8-[2-(2-fluoro-phenyl)-imidazol-1-yl]-imidazol[1,2-a]pyrazin-6-yl\}-phenyl)-urea;$
- 1-(3-Chloro-4-fluoro-phenyl)-3-(3-{8-[2-(2-fluoro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-urea;
- 1-(3-{8-[2-(2-Fluoro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-3-(3-trifluoromethyl-phenyl)-urea;
- 1-(3-{8-[2-(2-Methoxy-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-3-(3-trifluoromethyl-phenyl)-urea;

- 1-(4-Chloro-phenyl)-3-{3-[8-(2-isopropyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 1-(3-Chloro-4-fluoro-phenyl)-3-{3-[8-(2-isopropyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-urea;
- 1-{3-[8-(4-Bromo-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-3-(4-chloro-phenyl)-urea;
- 4-Fluoro-N-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide;
- 3-Methoxy-N-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide
- 3-Methoxy-4-methyl-N-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide;
- N-{3-[8-(2-Phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide;
- 2,6-Dimethyl-N-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide;
- 4-Fluoro-N-{3-[8-(2-p-tolyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide;
- 3-Methoxy-N-{3-[8-(2-p-tolyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide;
- 3-Methoxy-4-methyl-N-{3-[8-(2-p-tolyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-benzamide;
- 2-(4-Chloro-phenyl)-N-{3-[8-(2-phenyl-imidazol-1-yl)-imidazo[1,2-a]pyrazin-6-yl]-phenyl}-acetamide:
- 2-(4-Chloro-phenyl)-N-(3-{8-[2-(4-chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-acetamide;
- N-(3-{8-[2-(4-Chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-2-(3-trifluoromethyl-phenyl)-acetamide;
- 1-(3-{8-[2-(4-Chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-3-(4-morpholin-4-ylmethyl-phenyl)-urea;
- 1-(4-Chloro-benzyl)-3-(3-{8-[2-(4-chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-urea; or
- 1-(3-{8-[2-(4-Chloro-phenyl)-imidazol-1-yl]-imidazo[1,2-a]pyrazin-6-yl}-phenyl)-3-[4-(4-methyl-piperazin-1-ylmethyl)-phenyl]-urea.